

TECHNICAL BULLETIN Energy Codes Sunroom Additions, September 1, 2002

The requirements set out in this technical bulletin apply to sunroom additions to single family residences.

As defined a **sunroom** is an addition to single family residences with a conditioned floor area of less than 500 square feet in floor area with a glazing area in excess of 40 percent of the gross area of the addition's exterior walls and roof. Building additions equal to or in excess of 500 square feet must comply with the requirements for new construction.

As defined a **thermal isolation** is a separation of conditioned spaces, between a sunroom addition and a dwelling unit, consisting of existing or new wall(s), doors and/or windows. New wall(s), doors and /or windows shall meet the values in the table below.

The following general rules apply:

- Conditioned sunroom additions shall be served by a separate heating or cooling system, or shall be controlled as a separate zone of the existing system.
- The sunroom addition shall be separated from the existing conditioned spaced by a **thermal isolation** as defined above.
- □ The *U*-factor of each individual fenestration product shall be used to calculate an area-weighted average fenestration product *U*-factor for the addition, which cannot exceed the value in the table below.
- □ The *R*-values for the walls, ceilings and floors shall be as indicated it the table below.
- □ The area weighted average of all new and replacement glazed fenestrations (where the entire unit, including the frame, sash and glazing, is replaced) shall not exceed 0.4, except:
 - Any glazing facing within 45 degrees of true north.
 - Any glazing facing within 45 degrees of true south which is shaded along its full width by a permanent overhang with a projection factor of 0.3 or greater.
 - Any fenestration with attached screens where the screens have a rated shading coefficient of 0.6 or less.

Maximum	Minimum				
Fenestration <i>U</i> -Factor	Ceiling <i>R</i> - value ^a	Wall R-value	Floor R-value	Basement Wall R-value ^b	Crawl space wall <i>R</i> -value ^d
0.5	R-30	R-13	R-19	R-8	R-10

^a "Ceiling *R*-value shall be required for flat or inclined (cathedral ceilings. Floors over outside air shall meet "Ceiling *R*-value requirements.

^b Basement wall insulation shall be installed in accordance with section 502.2.1.6.

^d "Crawl space wall *R*-value" shall apply to unventilated crawl spaces only. Crawl space insulation shall be installed in accordance with Section 502.2.1.5.